

Maine Natural Areas Program

17 Elkins Lane

State House Station #93

Augusta, Maine 04333

Date: March 16, 2010

To: Becky Blais, DEP Project Manager

From: Sarah Demers 

Re: Rare and exemplary botanical features, DEP Project #L-24843-26-A-N, L-24843-TG-B-N, L-24843-IW-C-N, L-24843-L6-D-N and L-24843-4P-E-N, Calais LNG Terminal and Pipeline Sewer Separation Project, Calais to Baileyville, Maine.

I have searched the Natural Areas Program's Biological and Conservation Data System files for rare or unique botanical features in the vicinity of the proposed site in response to your request of February 22, 2010 for our agency's comments on the project.

I have used SLOD Figure 1-1 Preferred Pipeline Route provided by the Applicant in the DEP application to conduct our review. According to our current information, it appears there are no rare botanical features that will be disturbed within the Terminal Site location or the Preferred Pipeline Route. Should the location of the pipeline change from the currently proposed location along the southern side of US Route 1 through Baileyville and Princeton to the northern side of US Route 1 in Baileyville and Princeton, the Maine Natural Areas Program would request notification and additional consultation with DEP and the Applicant.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

The Natural Areas Program is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We welcome the contribution of any information collected if a site survey is performed.

Thank you for using the Natural Areas Program in the environmental review process. Please do not hesitate to contact our office if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.



June 1, 2010

Becky Blais
Division of Land Resource Regulation
Maine Department of Environmental Protection
17 State House Station
Augusta, Maine 04033-0017

Re: May 7, 2010 Request for Additional Information – Site Location of Development Law and Natural Resources Act Applications on behalf of Calais LNG Project Company, LLC & Calais LNG Pipeline Company, LLC, Calais, Maine.

Dear Ms. Blais:

On behalf of Calais LNG Project Company, LLC and Calais Pipeline Company, LLC ("Calais LNG"), Woodard & Curran (W&C) has reviewed the Department's comments and requests for additional information contained in your May 7, 2010 letter. We have prepared the following letter to respond to the Department's comments and requests by Dr. John Hopeck in his May 6, 2010 Review Memorandum to you. For clarity, the comments have been included in this letter (verbatim) in italicized type with each comment number in bold text. The response by W&C on behalf of Calais LNG is summarized below each comment in regular type.

Comment 1: *Section 15.2.4 of the application describes pipeline maintenance activities, and specifies mechanical removal of vegetation. This implies that there will be no use of herbicides along the right-of-way, which is consistent with the approved practices of the Maritimes and Northeast pipeline.*

Response: Herbicides will not be used on the pipeline right-of-way. Mechanical means will be used to control vegetation.

Comment 2: *Section 15.3.4 estimates a water usage of approximately 1200 gallons per day. This appears to be within acceptable limits for the site and is not anticipated to result in unreasonable adverse impact on surface waters on or adjacent to the site, or have a significant adverse impact on other wells in the vicinity of the project. I would not necessarily assume that all of the recharge to till overburden will necessarily become recharge to bedrock, due to losses to soil moisture, evapotranspiration, and other factors; the proposed usage may therefore be greater than the estimated 1.6% of bedrock recharge. Water levels reported from the observation wells suggest that many of the wetlands at the site are perched on relatively low permeability overburden, so that withdrawal of groundwater from bedrock is less likely to impact these resources. This section also notes that there will need to be "back up water to fill vaporizers during periodic regular maintenance" and that this water will come from a "storage tank filled from the on-site groundwater system". Is the water required for this tank included in the 1200-gallon-per-day total? Is the tank the 10,000-gallon potable water tank described in Section 16-1? If not, what is the volume of this tank, and when and how often will it need to be filled?*

Response: The comments regarding the recharge to bedrock are acknowledged. Even if only 50% of the assumed recharge makes it to bedrock, the relative percentage of the total basin flow is small and not likely to impact other natural resources for the reasons cited in the comment. The filling of the vaporizers after periodic maintenance will be accomplished using water that was drained from the vaporizers and stored temporarily in the vaporizer overflow tank and then pumped back into the vaporizer once maintenance is complete. Therefore, the need for makeup water is unlikely to be necessary and it is not



anticipated that the on-site well will be needed to provide water to the vaporizers. The tank referred to in Section 15.3.4 is also the 10,000 gallon storage tank described in Section 16-1.

Comment 3: *The Spill Prevention, Control, and Countermeasures Plan in Appendix 15-B is labeled as a draft plan; a final version of the plan should be submitted for review and approval prior to operation of the facility. In particular, this final version should include a completed copy of the table in Section 1.2 of the draft plan, and a complete copy of the Emergency Response Plan (Appendix A). The plan received for review does not contain any procedures for notification of the Department; Department response staff must be notified of any spill within two hours of its discovery by the applicant if the applicant wishes to reduce potential liability. The applicant may make arrangements with the Bureau of Remediation and Waste Management to maintain a spill log and reduce this reporting requirement; if this is done, either a copy of this agreement must be provided to the Site Location project manager prior to operation, or the plan must contain complete information for notification of the Department within two hours. The applicant may subsequently modify the plan by submitting a copy of the agreement and a revised version of the plan to the project manager. Note that Section 3.2 of this plan discusses visual inspection of water in secondary containment areas prior to discharge. The applicant should note that many hydrocarbon compounds may be present in concentrations exceeding drinking water standards without forming a visible sheen; water from containment should not be discharged to the environment in an area or as a volume likely to adversely impact groundwater quantity. The Department generally recommends use of covered containment areas where practical and consistent with fire codes, or double-walled tanks with drip protection and collision protection, in order to avoid issues with disposal of water from containment structures.*

Response: The Spill Prevention, Control, and Countermeasures Plan (SPCCP) will be finalized and submitted for Department review and approval prior to commencement of facility operation. The final plan will include the completed table in Section 1.2 as requested and will contain a complete copy of the Emergency Response Plan. Prior to commencing facility operations, Calais LNG or its representatives will meet BRWM staff to develop site specific reporting requirements. A copy of this cooperatively-developed reporting and notification plan will be provided to the Site Location Project Manager.

The Department's statement regarding discharge of water in secondary containment areas is acknowledged. The main product stored at the facility is LNG, which is unlikely to adversely impact water resources if released, as it would freeze any water it contacted prior to the LNG subsequently vaporizing. Given the size of the secondary containment necessary to enclose the volume of the tanks, it would be impractical to provide overhead cover for the entire containment area and would be inconsistent with federally mandated safety requirements for LNG facilities and structures. Also, it should be noted that the LNG Tanks are double-walled and that the containment area provides tertiary containment.

Comment 4: *Section 16.2.1 estimates a withdrawal rate from the St. Croix River of approximately 4.5 cubic feet per second. Table 16-1 indicates an expected withdrawal rate of 0.5 cubic feet per second. This is likely a typographical error, since the other value shown (2000 gallons per minute) is approximately equal to 4.5 cfs.*

Response: This is a typographical error. The withdrawal rate number should be 4.5 cfs. A corrected replacement page is attached.

Comment 5: *Section 16.2.2 states that there are three existing supply wells near the terminal site. Note that the on-site domestic well shown in Figure 16-2 is not the well shown in Figure 15-2, which is*



apparently the well serving the existing residence near the terminal site. Figure 2-6 in the Hydrogeology Report (Appendix 16-C) appears to show two wells at the site of DB-1, which would be consistent with the discussion in Section 15.4.2 of a contaminated dug well with a replacement well drilled "approximately 50 feet away". Table 2-2 of Appendix 16-C appears to list only drilled wells and does not include the dug well. Wells not to be used as part of this development must be abandoned in an appropriate manner. Dug wells may be filled with clean fill, compacted to the greatest practical extent; drilled wells should be filled with concrete, grout, or the equivalent using a tremie pipe or similar device so that the well is filled from the bottom to the surface or final grade in a manner that minimizes risk of formation of void space in the fill.

Response: The well depicted in Figure 16-2 is the proposed location for the new water supply well. This well will not be installed until approval from the Maine Drinking Water Program is obtained and the approval and other appropriate forms have been submitted to the Site Project Manager. The existing on-site domestic wells were not included in Figure 16-2 because these are proposed to be grout closed by a Maine Licensed well driller. The grout closure of these wells will be subject to a grout closure specification designed to minimize void formation (i.e., through the use of bottom up placement of grout via a tremie pipe). The domestic well depicted on Figure 15-2 corresponds to the SC-1 well referred to in the Hydrogeology report. Figure 15-2 only depicts the northern part of the site and the southern wells DB-1 and DB-2 are located outside the limits depicted in this figure. The DB-1 and DB-2 wells are drilled wells. For clarification, the abandoned well referred to in 15.4.2 was a very shallow drilled well, not a dug well. Drinking water wells not in use for water supply at the site will be grout closed as described earlier in this response.

Comment 6: *Section 16.3 indicates that a new well will be drilled on this site to provide drinking water for the facility. At this point, the well location does not appear to have been approved by the Department of Health and Human Services. The applicant should provide the Site Location project manger with a copy of the new source approval as soon as it is available, along with copies of the other documentation described in this subsection.*

Response: We agree with the comment and once the application has been made, and new source approval has been granted by the Department of Health and Human Services – Maine Drinking Water Program, Calais LNG will provide the Department's Site Location Project Manager with the appropriate documentation as soon as it is available.

Comment 7: *The figures showing wastewater disposal systems 1 and 2 in Appendix 17-A have been reproduced at scale such that many details are not clearly legible, and at least the figure showing system to appears to have been copied while folded, so that much of the plan is obscured. Complete and more legible copies of these plans should be submitted for review and approval.*

Response: Larger format figures depicting the proposed wastewater disposal systems are provided as Attachment A to this letter.

Comment 8: *The blasting limits and record keeping proposed is generally consistent with Department standards.*

Response: Comment acknowledged.

Comment 9: *No soils mapping was required at the terminal site due to the detail of the geotechnical investigation. Soils mapping was performed along the proposed pipeline right-of-way in order to identify*



limiting soils and to document predevelopment hydrology. No logs of explorations or other documentation has been submitted to support this mapping, and no exploration locations are shown on the soils maps. Some boring logs have been submitted for the preliminary geotechnical investigations in the areas under consideration for horizontal directional drills for the pipeline. It is understood that the final geotechnical investigations in these areas are sometimes not conducted until shortly before construction. These new surveys will need to be submitted for review and approval prior to construction, however.

Response: It is anticipated that additional pre-design geotechnical investigations will be conducted in support of design of the horizontal directionally drilled section of the Pipeline Route. The results of these investigations will be submitted to the Department for review and approval prior to construction.

If you have any questions regarding the responses to these comments or the attached additional information, please contact me at your earliest convenience.

Sincerely,

WOODARD & CURRAN INC.

Thomas R. Eschner
Project Director

TRE/JRH
219431.01

Attachments

cc: David Van Slyke, Preti Flaherty
Art Gelber, Calais LNG
File

2010.06.01
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Attachment A

System #1 - Subsurface Wastewater Disposal System Plan (36" x 48")

System #3 - Subsurface Wastewater Disposal System Plan (24" x 36")